

April 5, 2004

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Fr: George O. Saile, Reg. No. 19,572 28 Davis Avenue Poughkeepsie, N.Y. 12603

Subject:

Serial No. 10/791,015 03/02/04

You Feng Zheng et al.

FERROMAGNETIC/ANTIFERROMAGNETIC BILAYER, INCLUDING DECOUPLER, FOR LONGITUDINAL BIAS

INFORMATION DISCLOSURE STATEMENT

Enclosed is Form PTO-1449, Information Disclosure Citation In An Application.

The following Patents and/or Publications are submitted to comply with the duty of disclosure under CFR 1.97-1.99 and 37 CFR 1.56.

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on April 12, 2004.

Stephen B. Ackerman, Reg.# 37761

Signature/Date 553 4/12/09

HT-01-012B

- U.S. Patent 5,664,316 to Chen et al., "Method of Manufacturing Magnetoresistive Read Transducer Having a Contiguous Longitudinal Bias Layer," discloses that a ferromagnetic/ antiferromagnetic coupled layer could be used to replace a permanent magnet.
- U.S. Patent 5,528,440 to Fontana et al., "Spin Valve Magnetoresistive Element with Longitudinal Exchange Biasing of End Regions Abutting the Free Layer, and Magnetic Recording System Using the Element," discloses an improved spin valve (SV) magnetoresistive element having its free ferromagnetic layer in the form of a central active region with defined edges and end regions that are contiguous with and abut the edges of the central active region.
- U.S. Patent 6,185,078 to Lin et al., "Spin Valve Read Head with Antiferromagnetic Oxide Film as Longitudinal Bias Layer and Portion of First Read Gap," discloses using a layer of nickel oxide as a pinning layer for a NiFe bias layer.
- U.S. Patent 5,705,973 to Yuan et al., "Bias-Free Symmetric Dual Spin Valve Giant Magnetoresistance Transducer," discloses a structure eliminating the bias point offset present in prior dual spin vlave sensors.

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U.S. Patent 5,856,897 to Mauri, "Self-Biased Dual Spin Valve Sensor," discloses a stabilization layer under the lead layer.

Sincerely,

Stephen B. Ackerman,

Reg. No. 37761

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